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KENTUCKY

SENSITIVE PLANTS OF THE DANIEL BOONE NATIONAL FOREST



SENSITIVE PLANTS OF THE DANIEL BOONE NATIONAL FOREST

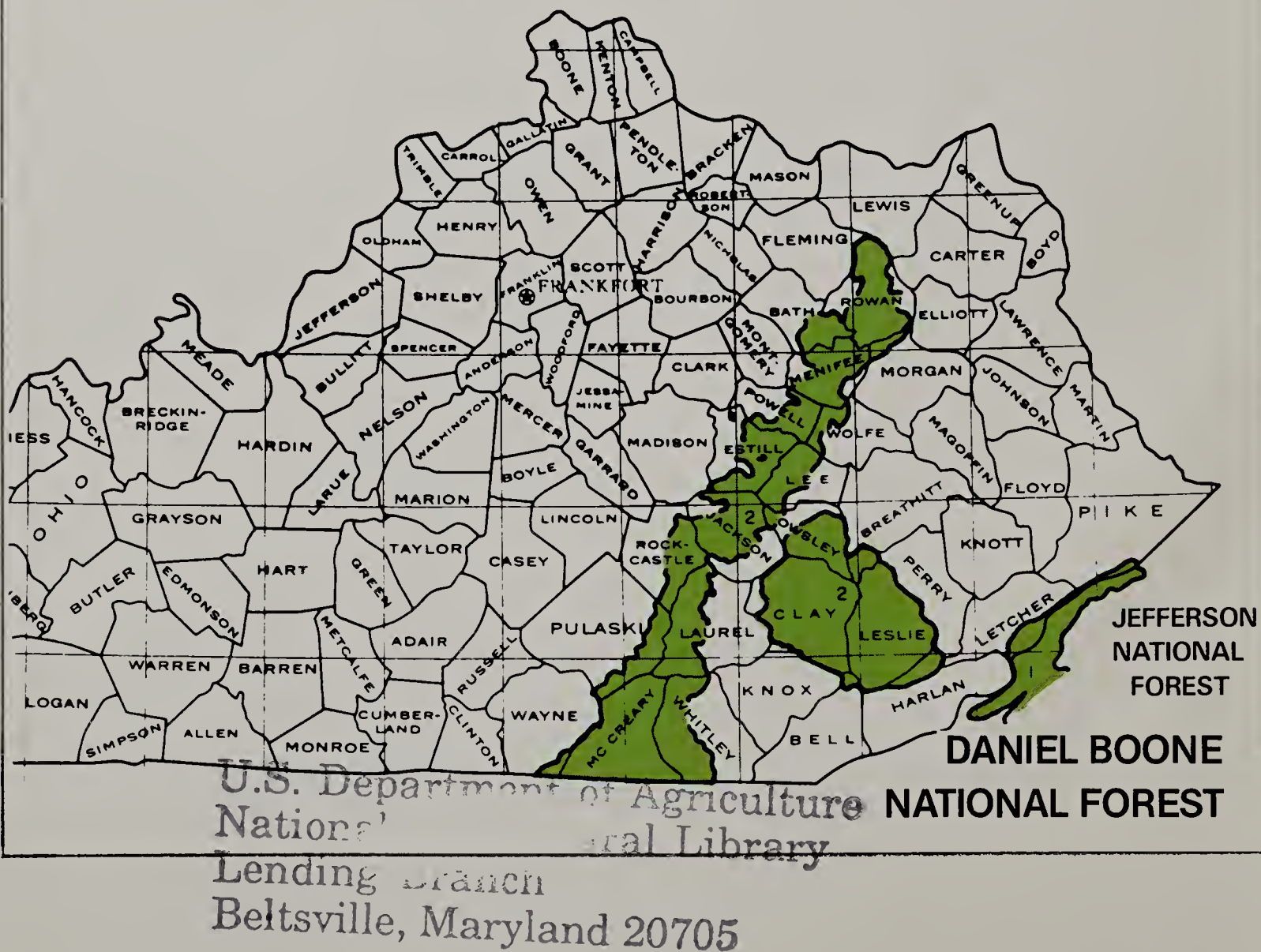
This booklet will help you to identify sensitive plant species that occur on the Daniel Boone National Forest. Sensitive plants are those plant species identified by the Regional Forester for which population viability is a concern, as evidenced by:

- a. significant current or predicted downward trends in population numbers or density.
- b. significant current or predicted downward trends in habitat capability which would reduce the species' existing distribution.

The basic information provided in this booklet is the results of an inventory of threatened, endangered and sensitive species contracted by the Kentucky Nature Preserves Commission, 407 Broadway, Frankfort, Ky. 40601.

Pictures were provided by the contractor or otherwise noted in the lower right corner of the photo.

Identifying characters include those that distinguish the species listed from a “look-alike” by using family, generic, species and varietal features.



INDEX
COMMON NAMES

Cumberland Red Azalea13
Cumberland Rosemary4
Fraser's Sedge5
Ginseng9
Golden Seal8
Gyandotte Beauty15
Kentucky Lady Slipper6
Lucy Braun's White Snakeroot7
Purple Fringless Orchid12
Purple Sedge2
Tubercled Orchid10
White Fringless Orchid11
White Haired Goldenrod14
Yellow-wood3

INDEX
SCIENTIFIC NAMES

Carex purpurifera2
Cladrastis kentukea3
Conradina verticillata4
Cymophyllus fraseri5
Cypripedium kentuckiense6
Eupatorium luciae-brauniae7
Hydrastis canadensis8
Panax quinquefolius9
Platanthera flava10
Platanthera integrilabia11
Platanthera peramoena12
Rhododendron bakeri13
Solidago albopilosa14
Synandra hispidula15

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Purple Sedge

SEDGE



Dr. Eugene Wofford



Dr. Eugene Wofford

Name: Purple Sedge
(*Carex purpurifera*)

Family: Sedge (Cyperaceae)

Flowering Period: May

Fruiting Period: June

Habitat: Slopes in rich woods, usually in mountainous areas. No other distinctive features of the habitat have been noticed.

Identifying Characters: Characterized by its purplish culm (stem) and leaf bases which give the case of the plant a purple color. The leaves are 3-5 decimeters (about a foot) long and usually droop to the downslope side. The flowering culms or stems are also 3-4 decimeters tall. The flowering culms terminate in one to several very loosely flowered green spikes 1-2 centimeters long.

Counties: Whitley, Rockcastle, Estill

Districts: Stearns, London, Berea, Stanton

Yellow-wood

TREE



Name: Yellow-wood
(*Cladrastis kentukea*)

Family: Bean Family (Fabaceae)

Flowering Period: May

Fruiting Period: July-August

Habitat: In the Kentucky River Palisades, the Yellow-wood grows on dry, partly exposed limestone bluffs with thin soil. In Whitley County, it grows in rich mesophytic woods on hillsides over sandstone.

Identifying Characters: A small- to medium-sized tree with pinnately compound leaves of 5 to 11 (mostly 6-9) leaflets each. These leaflets are very regularly pinnately veined. The fruits are flat, thin legume, tapering at both ends and containing four to six seeds. The bark of this species is characteristic. It is light gray in color and very smooth in texture and grows to 15 meters (CA. 49.5 ft.) tall.

Counties: Bell, Whitley, McCreary, Pulaski

Districts: Redbird, Stearns, London, Somerset



Name: Cumberland Rosemary
(*Conradina verticillata*)

Family: Mint (Lamiaceae)

Flowering Period: Late May-early June

Fruit Period: July

Habitat: This species is found on the highest portion of rocky rivers, bars composed of unsorted boulders, rocks, gravel and sand, and are usually associated with loose sand, often between rocks.

Identifying Characters: A small shrub about 5 decimeters (CA. 1.6 ft.) high. It has opposite leaves which are divided into several needle-like leaflets which appear to be whorled. The lavender or purple (spotted purple within) flowers are born in the leaf axils near the top of the plants.

County: McCreary

Districts: Stearns, Somerset

Fraser's Sedge

SEDGE

Dr. Eugene Wofford



Dr. Eugene Wofford

Name: Fraser's Sedge
(*Cymophyllus fraseri*)

Family: Sedge (Cyperaceae)

Flowering Period: May

Fruiting Period: June

Habitat: Slopes in rich mountain woods. In Kentucky the only known colonies are on slopes above streams usually within 35 meters (115.5 feet) of the stream.

Identifying Characters: *Cymophyllus fraseri* is a very distinctive species with long (2-6 decimeters), wide (2-5 centimeters) dark green, leathery, evergreen leaves which are minutely serrulate (very finely toothed on the edge). It occurs in clumps of one to several plants which compose small to large (up to several hundred plants) colonies. The flowers are white instead of green, or green and brown as in true *carex* species and are monoecious and solitary on the ends of 2-5 decimeters (CA. 0.6-1.7) stems.

County: Letcher

District: Clinch (see map inside front cover)

Jefferson NF



Name: Kentucky Lady Slipper
(*Cypripedium kentuckiense*)

Family: Orchid (Orchidaceae)

Flowering Period: May

Fruiting Period: May

Habitat: Sandy floodplain woods that appear to be flooded several times during the spring and fall. The more common and widespread yellow lady's slipper (*Cypripedium calceolus* var. *pubescens*) typically grows on mesophytic wooded slopes which are never flooded.

Identifying Characters: This is a large species of lady's slipper. It is noticeably larger than the yellow lady's slipper (*Cypripedium calceolus* var. *pubescens*) with which it is most closely related. The cream to white-colored lip has a deeper pouch in relation to the length than the other species of lady's slippers. The end of the pouch does not extend much beyond the opening in the top. The lip usually has several purple dotted stripes on the inside that converge near the base of the column and often has several protrusions (painted bumps) on the lower outer surface. This species flowers about two weeks later than the more common yellow lady's slipper. This species is 3.5-9.7 decimeters (1.2-3.2 feet) tall.

Counties: Rowan, Menifee, Estill, Rockcastle, Laurel, Pulaski

District: Stanton, Berea, London, Somerset, Morehead

Lucy Braun's White Snakeroot

FORB



Name: Lucy Braun's White Snakeroot
(*Eupatorium luciae-brauniae*)

Family: Aster (Asteraceae)

Flowering Period: September

Fruiting Period: September

Habitat: Stream gorges, confined to the sandy floors of sandstone rockhouses, growing behind the drip line.

Identifying Characters: *Eupatorium luciae-brauniae* is closely related to *Eupatorium rugosum* but the two are easily distinguishable by comparing the smooth stems and deltoid cordate (heart-shaped) leaf bases of *E. luciae-brauniae* with the pubescent stems and ovate leaves of *E. rugosum*. In addition, *E. luciae-brauniae* is common in woodlands and is seldom, if ever, found in these rockhouses. *E. luciae-brauniae* grows 3-6 decimeters (CA. 1-2 feet) tall.

Counties: McCreary, Whitley, Wolfe

District: Stanton, Stearns, Somerset



Name: Golden Seal
(*Hydrastis canadensis*)

Family: Buttercup (Ranunculaceae)

Flowering Period: April-May

Fruiting Period: June-July

Habitat: This species grows in moist or mesic woodlands in a variety of situations.

Identifying Characters: The heart-shaped palmate leaves, greenish white flowers and red, raspberry-like fruit of this species are distinctive and do not closely resemble any other plant species in the National Forest. This easily recognized herb grows 1.5-5 decimeters (CA. 0.5-1.6 feet) tall.

Counties: Wayne, McCreary, Whitley, Laurel, Rockcastle, Bell, Harlan, Pike, Clay, Jackson, Madison, Menifee, Bath, Rowan

District: Stearns, London



Name: Ginseng
(*Panax quinquefolius*)

Family: Ginseng (Araliaceae)

Flowering Period: June-July

Fruit Period: Late August or September

Habitat: *Panax quinquefolius* grows in moist, rich woods that vary in composition (in the Daniel Boone National Forest) from mixed mesophytic to oak-hickory. It is not particularly associated with any plant species.

Identifying Characters: Ginseng is characterized by 1-5 (3) five-fingered leaves which arise from a single stem 2-6 decimeters (CA. ½ to 2 feet) tall. These leaves resemble those of Virginia Creeper (*Parthenocissus quinquefolia*) but should not be confused because the former is an erect herb while the latter is a creeping, climbing, woody vine. Ginseng bears a small cluster of inconspicuous white flowers which ripen into a cluster of plump, brightened berries. The root of this species is fleshy or woody and is single or forked.

Counties: Madison, Jackson, Estill, Lee, Clay, Laurel, Whitley, Bell, Harlan, Wolfe, Menifee, Leslie, Pike

Districts: Stearns, Berea, Somerset, Stanton, London, Morehead, Redbird



Name: Tubercled Orchid, Pale Green Orchis
(*Platanthera flava*)

Family: Orchid (Orchidaceae)

Flowering Period: June-September

Fruiting Period: June-September

Habitat: Wet meadows, marshes, alluvial woods and swamp forests.

Identifying Characters: 1.5-6 decimeters (CA. 0.5 to 2 ft.) tall. *Platanthera flava* can be readily distinguished from *Platanthera clavellata*, a similar species of wet habitats, because *P. clavellata* rarely has more than one cauline (stem) leaf and the teeth or lobes of the lip are terminal instead of being lateral as in *P. flava*.

Counties: Rowan, Letcher, Bell, Whitley, McCreary, Laurel, Rockcastle

Districts: Stearns, Morehead, London, Redbird, Somerset, Berea



Name: White Fringless Orchid, Monkey Face
(*Platanthera integrilabia*)

Family: Orchid (Orchidaceae)

Flowering Period: August-early September

Fruiting Period: September-November

Habitat: Flat wet areas at the head of streams that start on sandstone ridgetops and in swag ponds and wet swales on these ridgetops.

Identifying Characters: Like no other species of orchid in Kentucky. It is similar to the White Fringed Orchid (*Platanthera blephariglottis*) of the northern bogs and coastal plains, but differs from it in having no fringe on the lip and in having fewer and larger flowers. It also grows in wet woods rather than open bogs and savannas as in *P. blephariglottis*. The fruit capsules sometimes persist through winter. Grows up to 60 centimeters (2 ft.) tall.

County: McCreary

Districts: Somerset, Stearns

Purple Fringless Orchid

FORB



Name: Purple Fringless Orchid
(*Platanthera peramoena*)

Family: Orchid (Orchidaceae)

Flowering Period: June-August

Fruiting Period: June-August

Habitat: Wet meadows, roadsides, ditches, stream banks, wet-gold fields and most characteristically in open to shaded swamp forests which are wet at least in the spring.

Identifying Characters: These perennial plants may grow up to 3 feet tall and have two to five leaves up to 5 inches long and 2 inches wide. The flowers are clustered at the tip of the stem (10-50) and are purple or rose-purple with a deeply tripartite, non-lacerate lip. Its erose or dentate lip segments separate it from the other two purple-flowered species of *Platanthera*.

Counties: Bath, Madison, Jackson, Rockcastle, Laurel

Districts: Morehead, Berea, London

Cumberland Red Azalea

SHRUB



Name: Cumberland Red Azalea
(*Rhododendron bakeri*)

Family: Heath (Ericaceae)

Flowering Period: June

Fruiting Period: May

Habitat: *Rhododendron bakeri* grows on the slopes and tops of sandstone ridges in open oak woods and at the edges of clearings.

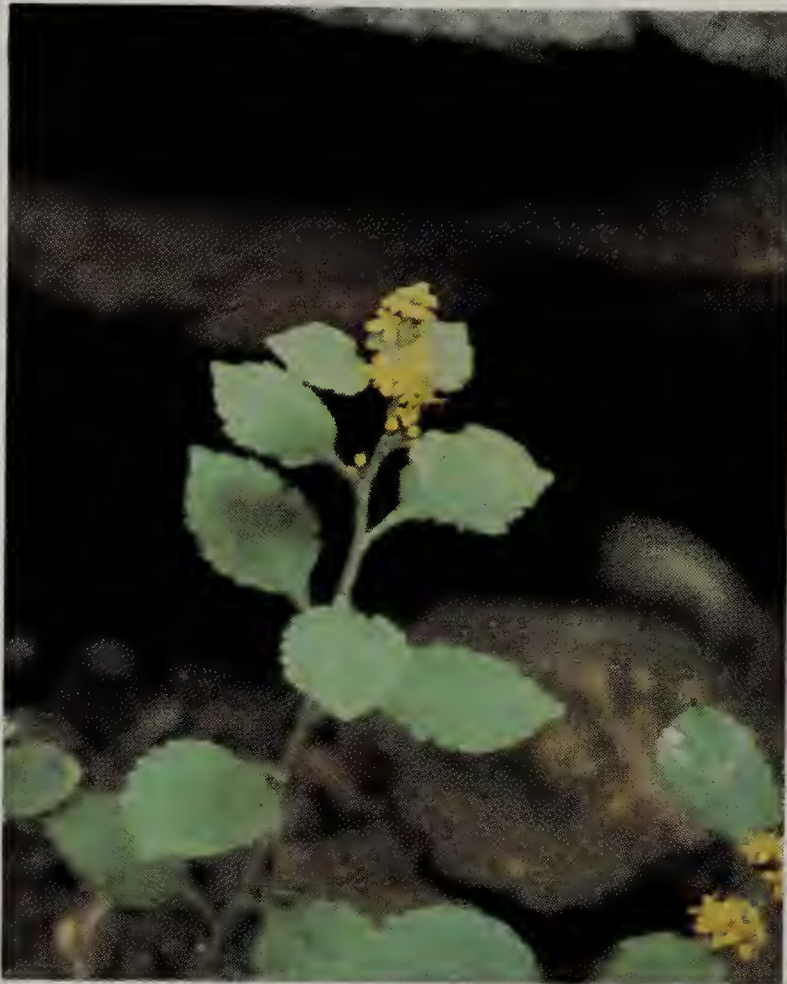
Identifying Characters: This species of azalea is nearly always red or red-orange in flower instead of yellow or yellow-orange as in the flame azalea (*Rhododendron calendulaceum*). It also flowers in June after the leaves are out instead of May when the leaves are just opening as the Flame Azalea does. Grows to 3 meters (CA. 10 feet) tall.

Counties: Morgan, Pike, Letcher, Harlan, Bell, Whitley, McCreary, Laurel, Owsley, Clay, Perry

Districts: Somerset, Morehead, Redbird, Stearns, London

White Haired Goldenrod

FORB



Name: White Haired Goldenrod
(*Solidago albopilosa*)

Family: Aster (Asteraceae)

Flowering Period: Late September-November

Fruiting Period: October-December

Habitat: Grows only in the sandy floor of sandstone rockhouses and the ledges in their walls. It grows completely behind the drip line where it receives direct rain only in severe storms. The overstory vegetation is mixed mesophytic and very occasionally in oak-hickory forest.

Identifying Characters: Closely related to *Solidago flexicaulis* (occasionally hybridizing with it) and is derived from the species. The entire plant (leaves and stem) is hairy with conspicuous white hairs in *S. albopilosa*. The stems of this species are often very lax and decumbent or reclining instead of rigid and erect as in *S. flexicaulis*. The leaves of *S. albopilosa* are soft and velvety to the touch instead of slick and smooth as in *S. flexicaulis*. This species grows to .75M (CA. 2.5 ft.) tall and has leaves that are toothed and almost heart-shaped at the leaf base. The bright yellow flower occurs in clusters of one to three in the axils of the upper leaves.

Counties: Wolfe, Menifee, Powell

Districts: Stanton, Morehead

Gyandotte Beauty

FORB



Name: Gyandotte Beauty
(*Synandra hispidula*)

Family: Mint (Lamiaceae)

Flowering Period: May-July

Fruiting Period: May-July

Habitat: Mesic, rich woods, usually in stream valleys and is very often found growing with *Valeriana pauciflora*.

Identifying Characters: The flowers have characteristic snapdragon-like appearance. It is a winter annual 2-6 decimeters (CA. 0.7-2 ft.) tall.

Counties: Pulaski, Rockcastle, Clay, Madison, Powell, Wolfe, Menifee

Districts: Somerset, Berea, Redbird

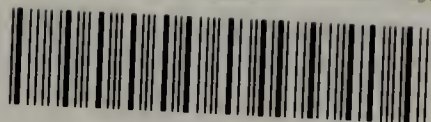
Sensitive Plants . . . Part Of Your National Forests

The National Forests are managed under the multiple use system which calls for using the various forest resources in the combinations that will benefit the most people. Protecting sensitive plants is part of this management.

We need your help in locating and protecting these beauties of the forest. Please let us know if you see any of the plants described in this booklet.

Civilization sometimes takes ruthless toll of beauty as it moves forward. The world has lost much that is beautiful in the name of progress.

The responsibility of protecting the beauty that is left belongs to all of us, especially on our public lands. Let's help each other to keep natural beauty a prominent part of the National Forest System.



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